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THE FAC AND THE FUTURE (“FAC IT”)

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Note from the Editor: Throughout the history of war and conflict, change is the one constant. Often change and changes in tactics come full circle. This article reminds the warfighter that evolving operational environments necessitate flexibility in both tactics and resources. With an increase in near-peer focus, the joint force is again looking for ways to shift tactics and uses of resources to counter the new threat.

Overview

Any discussion of Air Force support for US Army forces eventually equates to the question, "Can the forward air controller (FAC) survive in modern warfare?". Based on experience, many say "No, the mission of the FAC is to fly and die." "Remotely piloted vehicles are the answer." "Let the Army control close air support." Each of these statements writes off the FAC. However, the history of air warfare shows that the FAC has adapted and survived as warfare has changed. Out of necessity, the FAC has reappeared in every recent conflict we have fought. I don't believe we need to write off the FAC; in fact, we can't afford to write him off. The FAC is the central and final control node for command, control, and communication operations of tactical air (TACAIR), and he must remain the focal point for coordinating aerial firepower in close support of ground forces.

An understanding of the tactical air control party (TACP) is vital to the theme of this article--the survival and mission effectiveness of the FAC. The TACP, the forward element of the tactical air control system (TACS), has recently received increased emphasis in our tactical employment of airpower. Stationed with the US Army at battalion, brigade, and division level, the TACP provides the personnel, equipment, and expertise that makes close air support (CAS) possible. The TACP is made up of an air liaison officer, one or more FACs, and several radio operator, maintainer and drivers (ROMADs). The air liaison officer provides the expertise necessary to recommend and coordinate CAS with the fire and maneuver elements of his Army unit. The FAC controls close air support air strikes from the air, flying the O-2A or OV-10 aircraft, or from the ground as part of the ground FAC team. This team is presently composed of a FAC, a ROMAD, and communications equipment. The ground FAC concept is assuming a larger role in our tactical employment planning due to the increased vulnerability of the

airborne FAC in an increasing high threat environment. (More about the ground FAC team later.)

In discussions of the FAC and modern warfare, emphasis usually falls on the quantity, quality, and mobility of the air defense threat faced by the airborne FAC (AFAC). The sophistication of the air defense threat has certainly made it tougher for the AFAC to survive and complete his mission, but other changes in the modern battlefield may have a greater impact, positive rather than negative, on the FAC mission. The mobility of modern warfare, particularly armor, has done much to blur the distinction between CAS and interdiction. CAS (the traditional "troop-in-contact" with a definite front line) may only occur on a limited, small unit scale.

Top priority of the air-to-surface effort may be of the battlefield interdiction type targets which have a direct effect on front line operations and require coordinated but not integrated fire power (approximately 5-25 km behind front line). Precise target marking may be academic when the target is a Soviet tank army on the move or a smoke filled battle arena. To meet the needs of the modern battlefield, the classic tactics and equipment of the FAC must change and are changing.



Wraith Challenge competitors from the 9th Air Support Operations Squadron execute a target-talk-on with an AH-64D Apache Longbow, April 22, 2021, at Fort Bliss, Texas. The event during Wraith Challenge tested the competitors' abilities to coordinate air effects into the ground scheme of maneuver. (US Air Force photo by Capt. Faith Brodkorb)

Developing and Testing High-Threat Tactics

Beginning with Exercise BRAVE SHIELD XIII and continuing with BOLD EAGLE 76, the FAC force developed and tested threat avoidance tactics; results of these initial tests were positive. FAC survivability was significantly improved.

During BRAVE SHIELD XIII, the CAS team concept was developed. The CAS team used a ground FAC (GFAC), an AFAC and a forward air control post (FACP) (a highly mobile radar control unit) to control CAS. Simulating a high-threat environment with aircraft flying at near treetop level, airborne communications ranges are limited, and the CAS team was employed to overcome these obstacles. The GFAC, located with his Army unit, radioed target information to an AFAC orbiting at low altitude far enough behind the lines to be underneath the surface-to-air missile (SAM) envelope. The AFAC passed the target briefing to the FACP, who briefed the strike flight while they were inbound to the battle area. The FACP positioned the strike flight over a predetermined initial point for a pop-up maneuver. The AFAC also ingressed at low altitude, carefully pre-planning his pull-up to mark the target so that the fighters were at the apex of their pop-up as the smoke rocket hit. Although this tactic highlighted some technical problems, AFAC survivability was improved by minimizing exposure to the threat.

In BOLD EAGLE 76 a variation of these tactics was used. The AFAC still remained behind the lines and relayed target information from the GFAC, but the AFAC did not ingress and mark the target. Final control was passed to the GFAC when the fighters left the initial point inbound to the target. The AFAC acted as a "traffic cop" plotting targets, planning fighter run-ins, and coordinating with the GFAC for final control of the strike. Added realism was provided by simulating a comm-jamming environment. The traditional long-winded FAC briefing was reduced to less than ten seconds through preplanning of attack parameters.

In addition, the integration of the Army helicopter as a new member of the FAC team is fast becoming a reality. About a quarter of all CAS missions during BOLD EAGLE 76 were controlled by Air Force FACs in Army helicopters and more recently joint air attack team tactics have been developed by Tactical Air Command (TAC) and US Army Training and Doctrine Command with the blue and green teams working in concert using the A-10/AH-1S/ OH-58/OV-10 in a combined arms team concept of operations. Using nap-of-the-earth flying techniques, choppers can use even small terrain features for concealment. The helicopter-borne FAC has better survivability than his fixed-wing AFAC counterpart, near the forward edge of the battle area.

The helicopter, such as an OH-58, is maneuverable, mobile, provides good visibility, is relatively quiet and contains VHF, UHF, and FM communications. Most Army commanders make a helicopter available when they are aware that the GFAC can provide increased influence on the battle's outcome by being more responsive to air support needs.

Present High-Threat Tactics

More recently, FACs from TAC, PACAF and USAFE met at the first Worldwide FAC Tactics Conference at the Tactical Fighter Weapons Center (TFWC). Key results were a standard high threat brief, common terminology, and high threat tactics. The "traffic cop" FAC was renamed the forward attack coordinator airborne (FACA) and the ground FAC is the forward FAC (FFAC).

The FACA positions himself in an area outside the range of enemy comm-jammers. When positioned in such an area, the FACA can climb to higher altitudes and still remain out of enemy SAM envelopes. The increase in altitude enhances the FACA's communications capability with the FFACs, the fighters, the brigade tactical operations center, the direct air support center (DASC), and other TAC elements.

The FFAC will normally take all targets identified by the ground commander, and pass the target information to the FACA. The FFAC's primary functions are to initiate air requests, provide attack data and in the end, conduct final air-strike control through voice communications or by marking the target with white phosphorous rockets, indirect fire, laser designator, or other means available to him. The mark is only an aid or cue to the strike flight and in many cases may not exactly pinpoint the target or even be available.

The FACA is the key to the entire operation. Basically, he is a tactician; he must determine how best to employ TACAIR once DASC delegated authority has been received. This authority should be delegated to the FACA as soon as possible, preferably before takeoff. His decision is influenced most importantly by the threat. He must also take into consideration the type of target, the terrain, friendly positions, desired results, the weather, the strike aircraft capabilities, the amount of time he has to work in and the restrictions given him by the FFAC. As you can see, he must be a highly motivated, extremely knowledgeable person. He must know each weapons system and its capabilities. He must stay abreast of the situation and know how to employ the TACAIR to achieve the desired results. We envision the FACA as the focal point for 1, 2, 3 or more FFACs. The FACA briefs the TACAIR on a secondary strike frequency which is free of any effective comm jamming. He sequences the TACAIR, clears them to depart the orbit point, the contact point, and the IP. He also must relay initial point departure calls to the FFAC to ensure proper mark coordination when a mark is utilized.

Tactics development and testing in exercises are important in preparing for CAS in a potential, real-world, high-threat environment. Red Flag exercises at Nellis AFB and local unit generated composite force training exercises; i.e., Operations SCOREBOARD, CACTUS ROUNDUP, good examples. Future exercises will continue to evaluate the FAC, his aircraft, and equipment under realistic high-threat conditions. It is every FAC/fighter pilot's responsibility to take advantage of each opportunity to develop, refine, and evaluate tactics to increase the airborne FAC's survivability and mission effectiveness in coordination with all ground and airborne elements, including the highly sophisticated Airborne Warning and Control System.

A New FAC Aircraft

Another way to increase AFAC survivability and effectiveness is to improve his equipment. An advanced FAC aircraft (FAC-X) is expected. The FAC-X will be designed for better survivability, with radar warning receivers and electronic/infrared countermeasures equipment. To improve mission effectiveness, the FAC-X should include secure, high-wattage transmitters, jam-resistant communications, modern navigation, rendezvous and possible weapons delivery systems, and the latest target acquisition and designation equipment. It should be capable of night and adverse weather operations and be able to carry sufficient ordnance to pin down the enemy in critical, low-medium threat situations until the strike force arrives. In addition, a two-seat FAC-X is needed in light of the airborne two man FAC concept of operations. A FAC/CAS TD&E is presently being proposed by TFWC to pursue the needs and requirements for a FAC-X aircraft. Although FAC tactics are much more developed now, the airborne platforms that are still being used are from the 50s-60s vintage/Vietnam. The FAC business, today, is a jet airplane oriented business and it takes two trained individuals airborne to work the problems presented to the FACA. Also, a new threat previously not encountered has appeared in the form of the attack helicopter. This threat will necessitate that the FAC X have sufficient dash capability thus enabling the airborne FAC to stay out of range of the enemy attack helicopter's weapons systems but still within visual range. If this capability is overridden, the only other option is to arm the airborne FAC with appropriate defensive weapons systems. In either case, the FAC-X will need sufficient power to carry the equipment and personnel to do its job properly and still be adequate through the 1980s.



An A-10 Thunderbolt II engages in a training mission at the Grayling Aerial Gunnery Range near Waters, Mich., April 7, 2016. The A-10 is operated by the 107th Fighter Squadron of the Michigan Air National Guard and are based at Selfridge Air National Guard Base, Mich. (U.S. Air National Guard photo by Master Sgt. David Kujawa)

The Ground FAC Team Assumes a Larger Role

Even with an advanced FAC aircraft, the airborne FAC will not be able to loiter in high-threat areas continuously and the role of the ground FAC team will assume greater importance. Since the air defense threat has significantly altered AFAC operations, the Army commander is more dependent on the ground FAC and ROMAD for close air support. The ground FAC team must be able to stay with Army commander in any terrain or combat situation. They cannot be tied to a vehicle such as the MRC-107/108 jeep-mounted mobile communications central, but must be able to move with the Army in suitable wheeled or tracked vehicles, helicopters, or on foot. Portable, high-powered, jam-resistant communications equipment is absolutely essential to the ground FAC team.

Reliable Communications Needed

Communications is the link which ties all CAS participants together, enabling them to operate as a team. Without dependable communications, timely support from intelligence and other TACS elements would be impossible. This is because communications is the key factor in all tactical operations. Development of reliable, jam-resistant communications equipment is receiving continuing emphasis. Three basic areas require improvement.

First, ground and airborne radios should be light weight, solid state, modularized, and the ground radios must be easily man-portable. Current technology could be used to increase output power and increase reliability, while decreasing size. New Mobile Radio Communications Central (MRC) System (when developed) will partially satisfy this requirement.

Small, easy-to-use encryption devices are needed to provide protection against enemy signals intelligence efforts. We must be able to encode and decode information on landlines, ground-based, and airborne radios. Digital communications terminals are being investigated by TAC as burst transmitters for TACs use. Finally, tactical satellite terminals would help overcome the susceptibility of our radios to jamming and provide accurate navigation positioning capabilities. These terminals must also be small and light weight and should interface with our encoding equipment.

Conclusion

A high-threat environment will never make the FAC obsolete. The FAC has remained a central figure within the tactical air control system through his contributions to centralized control, decentralized execution, and coordinated effort. Regardless of threat intensity, the unique ability of the FAC to control and coordinate aerial firepower remains necessary. However, FAC tactics and equipment do require change -- in some cases involving radical departure from tradition -- if the FAC is to survive and succeed. With tactics and equipment designed for the environment and appropriate support from other Air Force and Army elements, the FAC will be able to do his job effectively in the future. Capabilities of potential adversaries to disrupt CAS operations will continue to improve. So must the FAC's ability to control and coordinate aerial firepower in support of ground force operations.

The employment concept for FAC forces must continue to provide the flexibility required to operate in the total threat spectrum. The FAC must be able and prepared to use every “trick of the trade” to get the job done with accuracy, limited communications, and outdated aircraft. However, the FAC force is at a crucial stage in its development. Improvements in equipment are absolutely necessary, and the results will have a dramatic impact upon the future appearance of the Tactical Air Force.

Disclaimer. The opinions, conclusions, and recommendations expressed or implied within are those of the contributors and do not necessarily reflect the views of the Department of Defense or any other agency of the Federal Government.

ACRONYM LIST:

AFAC – airborne forward air controller	MRC – Mobile Radio Communications
CAS – close air support	ROMAD – radio operator, maintainer, and driver
DASC – direct air support center	SAM – surface-to-air missile
FAC – forward air controller	TAC – Tactical Air Command
FACA – forward attack coordinator airborne	TACAIR – tactical air
FACP – forward air control post	TACP – tactical air control party
FAC-X – advanced forward air controller aircraft	TACS – tactical air control system
FFAC – forward forward attack coordinator	TFWC – Tactical Fighter Weapons Center
GFAC – ground forward air controller	